



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,343	12/15/2000	James A. Brewer	AUS000424US1	9184

7590 03/10/2004
Joseph P. Lally
DEWAN & LALLY, L.L.P.
P.O. Box 684749
Austin, TX 78768-4749

EXAMINER

PHILLIPS, HASSAN A

ART UNIT	PAPER NUMBER
----------	--------------

2151

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/737,343

Applicant(s)

BREWER ET AL.

Examiner

Hassan Phillips

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 9, line 11; "application program" is referenced with reference numeral 316. The examiner feels this is incorrect since the application program is referenced as 306 in the drawings, and elsewhere in the disclosure. Appropriate correction is required.

2. The abstract of the disclosure is objected to because of its undue length. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

1. Claims 1, 8, 15, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 8, 15, recite the limitation "the contents" in the last line of the claims. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2151

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 8, 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kwan et al., U.S. Patent 6,411,966.

3. In considering claims 1 and 15, Kwan et al. discloses a method of operating a computer network, comprising:

- a) invoking a server program residing on a network server from a network user station, (col. 9 lines 21-23);
- b) retrieving a data file from a network server to a network user station, (col. 9, lines 24-25);
- c) recording changes made to the data file in a change file located in user station storage, (col. 9, lines 25-27);
- d) upon completing the changes, transferring the change file to the network server and modifying the data file on the network server based on the contents of the change file, (col. 9, lines 27-30).

4. In considering claim 8, Kwan et al. discloses a data processing network, comprising:

- a) a network server including processor and storage wherein the network server storage contains a server program code and data file code, (col. 10, lines 40-60);
- b) a network user station including processor and storage connected to the network server via a network medium, (col. 10, lines 40-60);
- c) invoking a server program residing on a network server from a network user station, (col. 9 lines 21-23);
- d) retrieving a data file from a network server to a network user station, (col. 9, lines 24-25);
- e) recording changes made to the data file in a change file located in user station storage, (col. 9, lines 25-27);
- f) upon completing the changes, transferring the change file to the network server and modifying the data file on the network server based on the contents of the change file, (col. 9, lines 27-30);
- g) The network server including code for modifying the data file on the network server based on the contents of the change file, (col. 10, lines 40-60).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwan et al. in view of Johnson et al., U.S. Patent 5,113,519.

3. In considering claims 2 and 16, although the disclosed method of Kwan et al. shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) periodically transferring the contents of the change file to the network server.

Nevertheless, periodically transferring contents of a change file from a network user station to a network server was well known in the art at the time of the present invention, and is demonstrated by Johnson et al. in a similar field of endeavor that teaches a method of operating a computer network comprising:

- a) periodically transferring the contents of a change file to a network server, (col. 15, lines 67-68, col. 16, lines 1-3).

Given the teachings of Johnson et al., it would have been apparent to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Kwan et al. in order to periodically transfer the contents of the change file to the network server. This would have allowed the network server to know when changes to the data file have occurred, Johnson et al., col.15, line 68, col. 16, line 1. Therefore, the claimed inventions (claims 2 and 16) would have been an obvious modification of the methods disclosed by Kwan et al. in view of Johnson et al.

4. Claims 3, 4, 17, 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwan et al. in view of Johnson et al., and further in view of Williams et al, U.S. Patent 5,781,908.

5. In considering claims 3 and 17, although the disclosed method of Kwan et al. in view of Johnson et al. shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) accumulating the contents of transferred change files in a master change file.

Nevertheless, accumulating the contents of change files transferred from a network user station to a network server was well known in the art at the time of the present invention, and is demonstrated by Williams et al. in a similar field of endeavor that teaches a method of operating a computer network comprising:

- a) accumulating the contents of transferred change files in a master change file on a network server, (col. 2, lines 36-41).

Given the teachings of Williams et al., it would have been apparent to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Kwan et al. and Johnson et al. in order to accumulate the contents of the periodically transferred change files in a master change file on the network server. This would have allowed the user to update files concurrently with the file transfer process, Williams et al., col. 2, lines 55-60. Therefore, the claimed inventions (claims 3 and 17) would have

been an obvious modification of the methods disclosed by Kwan et al. in view of Johnson et al., and further in view of Williams et al.

6. In considering claims 4 and 18, the method disclosed by Kwan et al. teaches modifying the data file based on the contents of the change file. See col. 9, lines 27-30.

7. Claims 5, 7, 19, 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwan et al. in view of Berstis, U.S. Patent 6,182,122.

8. In considering claims 5 and 19, although the disclosed method of Kwan et al. shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) determining portions of a server program that are frequently invoked by the user station, copying those portions to the local storage of the user station, and using the locally stored copies upon subsequently invoking one of the determined portions.

Nevertheless, the method of determining a frequently invoked portion of a network server program, copying that portion to a local hard drive, and using the locally stored copy upon subsequently invoking the portion was well known in the art at the time of the present invention, and is demonstrated by Berstis in a web server method that teaches operating a computer network comprising:

- a) determining portions of a server program that are frequently invoked by a user station, (col. 7, lines 8-20);

- b) copying the determined portions of the server program from the network to local storage of the network user station, (col. 8, lines 41-47);
- c) upon subsequently invoking one of the determined portions, using the locally stored copy of the server program, (col. 11, lines 37-39).

Given the teachings of Berstis, it would have been apparent to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Kwan et al. in order to copy frequently invoked portions of a network server to local memory of the user station, and using the locally stored copy upon subsequently invoking the portion. This would have provided quick and efficient access to the invoked portion, Berstis, col.2, lines 14-21. Therefore, the claimed inventions (claims 5 and 19) would have been an obvious modification of the methods disclosed by Kwan et al. in view of Berstis.

9. In considering claims 7 and 21, although the disclosed method of Kwan et al. shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) copying the determined portions into a non-volatile storage device of the user station.

Nevertheless, the method of copying portions of a server program to a non-volatile local storage device was well known in the art at the time of the present invention, and is demonstrated by Berstis in a web server method that teaches operating a computer network comprising:

- a) a non-volatile storage device at a user station, (col. 5, lines 32-42).

Given the teachings of Berstis, it would have been apparent to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Kwan et al. in order to have the retrieved portions of the server program copied into a non-volatile storage device at the local user station. Copying portions of the server program into a non-volatile storage device at the local user station would have guaranteed long-time storage of the portions of data for subsequent requests of the data, Berstis, col.2, lines 14-21. Therefore, the claimed inventions (claims 7 and 21) would have been an obvious modification of the methods disclosed by Kwan et al. in view of Berstis.

10. Claims 6, 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwan et al. in view of Berstis, and further in view of Orbits et al, U.S. Patent 5,630,097.

11. In considering claims 6 and 20, although the disclosed method of Kwan et al. in view of Berstis shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) recording page misses in a table in the user station.

Nevertheless, recording page misses in a table at the user station was well known in the art at the time of the present invention, and is demonstrated by Orbits et al. in a method that teaches an enhanced cache operation comprising:

- a) recording page misses in a buffer in the user station, (col. 6, lines 33-44).

Given the teachings of Orbits et al., it would have been apparent to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Kwan et al. and Berstis in order to include the recording of page misses in a table in the user station storage when determining frequently invoked portions of the server program. This would have verified that the invoked portion of the server program was being invoked frequently and should be stored to the user station to alleviate any further unnecessary cache misses, col. 2, lines 20-52. Therefore, the claimed inventions (claims 6 and 20) would have been an obvious modification of the methods disclosed by Kwan et al. in view of Berstis, and further in view of Orbits et al.

12. Claim 9, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwan et al. in view of Johnson et al., U.S. Patent 5,113,519.

13. In considering claim 9, although the disclosed method of Kwan et al. shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) periodically transferring the contents of the change file to the network server.

Nevertheless, periodically transferring contents of a change file from a network user station to a network server was well known in the art at the time of the present invention, and is demonstrated by Johnson et al. in a similar field of endeavor that teaches a method of operating a computer network comprising:

- a) periodically transferring the contents of a change file to a network server,
(col. 15, lines 67-68, col. 16, lines 1-3).

Given the teachings of Johnson et al., it would have been apparent to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Kwan et al. in order to periodically transfer the contents of the change file to the network server. This would have allowed the network server to know when changes to the data file have occurred, Johnson et al., col.15, line 68, col. 16, line 1. Therefore, the claimed invention (claim 9) would have been an obvious modification of the methods disclosed by Kwan et al. in view of Johnson et al.

14. Claim 10, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwan et al. in view of Johnson et al., and further in view of Williams et al, U.S. Patent 5,781,908.

15. In considering claim 10, although the disclosed method of Kwan et al. in view of Johnson et al. shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) accumulating the contents of transferred change files in a master change file.

Nevertheless, accumulating the contents of change files transferred from a network user station to a network server was well known in the art at the time of the

present invention, and is demonstrated by Williams et al. in a similar field of endeavor that teaches a method of operating a computer network comprising:

- a) accumulating the contents of transferred change files in a master change file on a network server, (col. 2, lines 36-41).

Given the teachings of Williams et al., it would have been apparent to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Kwan et al. and Johnson et al. in order to accumulate the contents of the periodically transferred change files in a master change file on the network server. This would have allowed the user to update the file concurrently with the file transfer process Williams et al., col. 2, lines 55-60. Therefore, the claimed invention (claim 10) would have been an obvious modification of the methods disclosed by Kwan et al. in view of Johnson et al., and further in view of Williams et al.

16. In considering claim 11, the method disclosed by Kwan et al. teaches modifying the data file based on the contents of the change file. See col. 9, lines 27-30.

17. Claims 12, 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwan et al. in view of Berstis, U.S. Patent 6,182,122.

18. In considering claim 12, although the disclosed method of Kwan et al. shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) determining portions of a server program that are frequently invoked by the user station, copying those portions to the local storage of the user station, and using the locally stored copies upon subsequently invoking one of the determined portions.

Nevertheless, the method of determining a frequently invoked portion of a network server program, copying that portion to a local hard drive, and using the locally stored copy upon subsequently invoking the portion was well known in the art at the time of the present invention, and is demonstrated by Berstis in a web server method that teaches operating a computer network comprising:

- a) determining portions of a server program that are frequently invoked by a user station, (col. 7, lines 8-20);
- b) copying the determined portions of the server program from the network to local storage of the network user station, (col. 8, lines 41-47);
- c) upon subsequently invoking one of the determined portions, using the locally stored copy of the server program, (col. 11, lines 37-39).

Given the teachings of Berstis, it would have been apparent to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Kwan et al. in order to copy frequently invoked portions of a network server to local memory of the user station, and using the locally stored copy upon subsequently invoking the portion. This would have provided quick and efficient access to the invoked portion, Berstis, col.2, lines 14-21. Therefore, the claimed invention (claim 12)

would have been an obvious modification of the methods disclosed by Kwan et al. in view of Berstis.

19. In considering claim 14, although the disclosed method of Kwan et al. shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) copying the determined portions into a non-volatile storage device of the user station.

Nevertheless, the method of copying portions of a server program to a non-volatile local storage device was well known in the art at the time of the present invention, and is demonstrated by Berstis in a web server method that teaches operating a computer network comprising:

- a) a non-volatile storage device at a user station, (col. 5, lines 32-42).

Given the teachings of Berstis, it would have been apparent to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Kwan et al. in order to have the retrieved portions of the server program copied into a non-volatile storage device at the local user station. Copying portions of the server program into a non-volatile storage device at the local user station would have guaranteed long-time storage of the portions of data for subsequent requests of the data, Berstis, col.2, lines 14-21. Therefore, the claimed invention (claim 14) would have been an obvious modification of the methods disclosed by Kwan et al. in view of Berstis.

20. Claim 13, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwan et al. in view of Berstis, and further in view of Orbits et al, U.S. Patent 5,630,097.

21. In considering claim 13, although the disclosed method of Kwan et al. in view of Berstis shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) recording page misses in a table in the user station.

Nevertheless, recording page misses in a table at the user station was well known in the art at the time of the present invention, and is demonstrated by Orbits et al. in a method that teaches an enhanced cache operation comprising:

- a) recording page misses in a buffer in the user station, (col. 6, lines 33-44).

Given the teachings of Orbits et al., it would have been apparent to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Kwan et al. and Berstis in order to include the recording of page misses in a table in the user station storage when determining frequently invoked portions of the server program. This would have verified that the invoked portion of the server program was being invoked frequently and should be stored to the user station to alleviate any further unnecessary cache misses, col. 2, lines 20-52. Therefore, the claimed invention (claim 13) would have been an obvious modification of the methods disclosed by Kwan et al. in view of Berstis, and further in view of Orbits et al.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kwan et al., U.S. Patent 6,411,966 discloses a method for minimizing traffic between a client and a remote server.

Johnson et al., U.S. 5,113,519 discloses a method for modifying a file, located on a remote server, at a client station.

Williams et al., U.S. Patent 5,781,908 discloses synchronizing a data file across a network.

Berstis, U.S. 6,182,122 discloses a method for caching data from a web server based on historical data requests.

Orbits et al., U.S. 5,630,097 discloses a method for enhancing a cache operation.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (703) 305-8760. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



FRANTZ B. JEAN
PRIMARY EXAMINER

HP
2/27/04